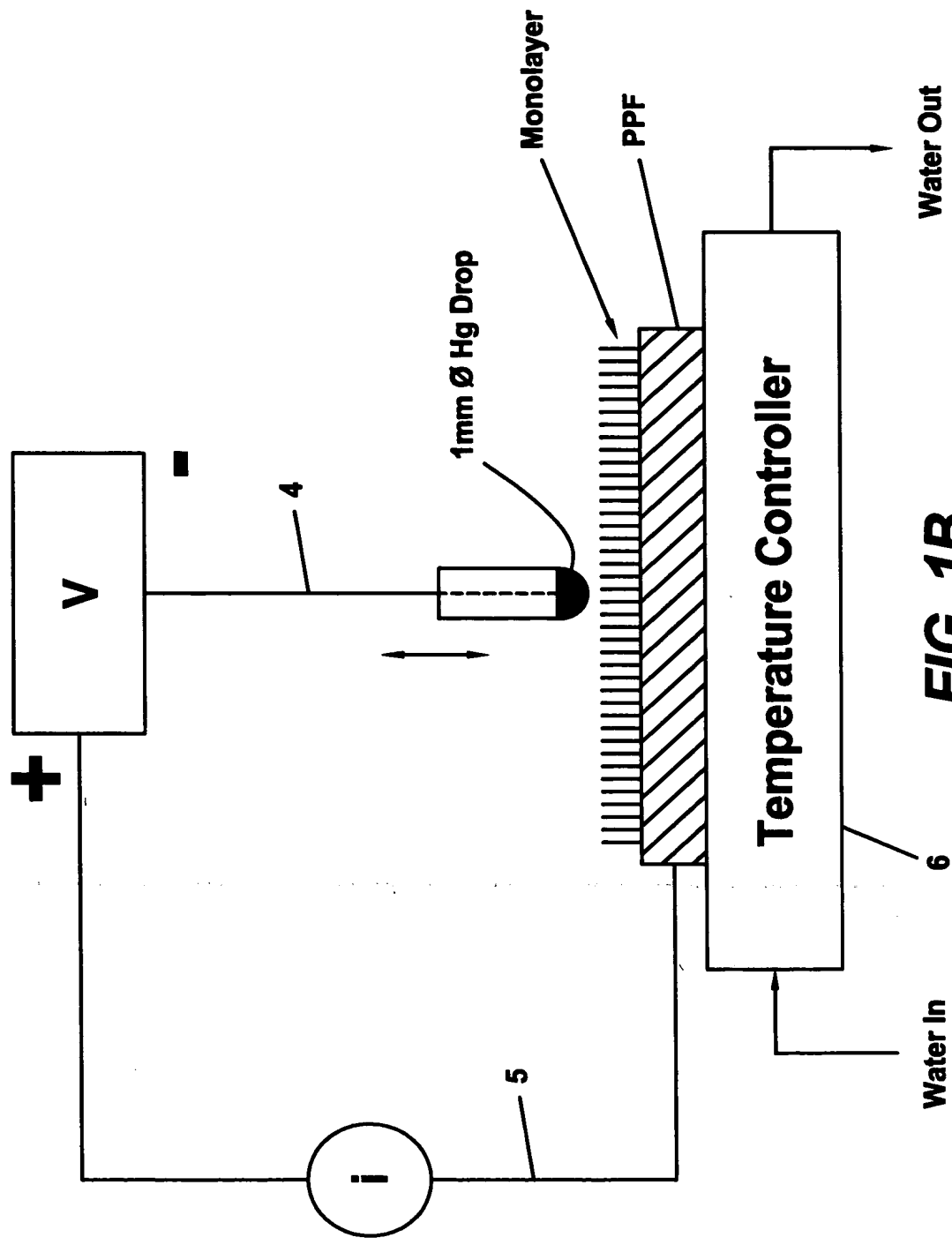


FIG. 1A



**FIG. 1B**

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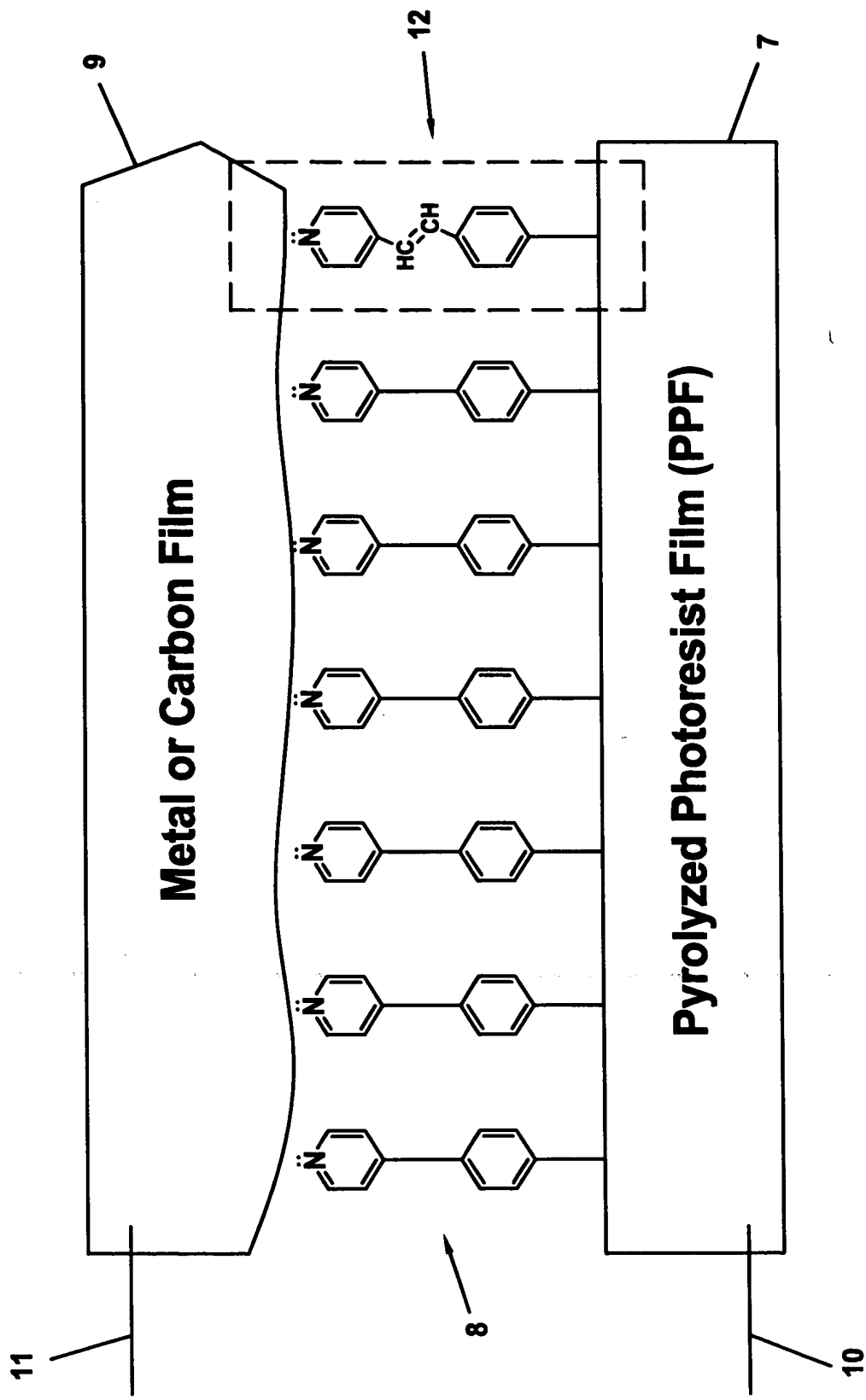


FIG. 2

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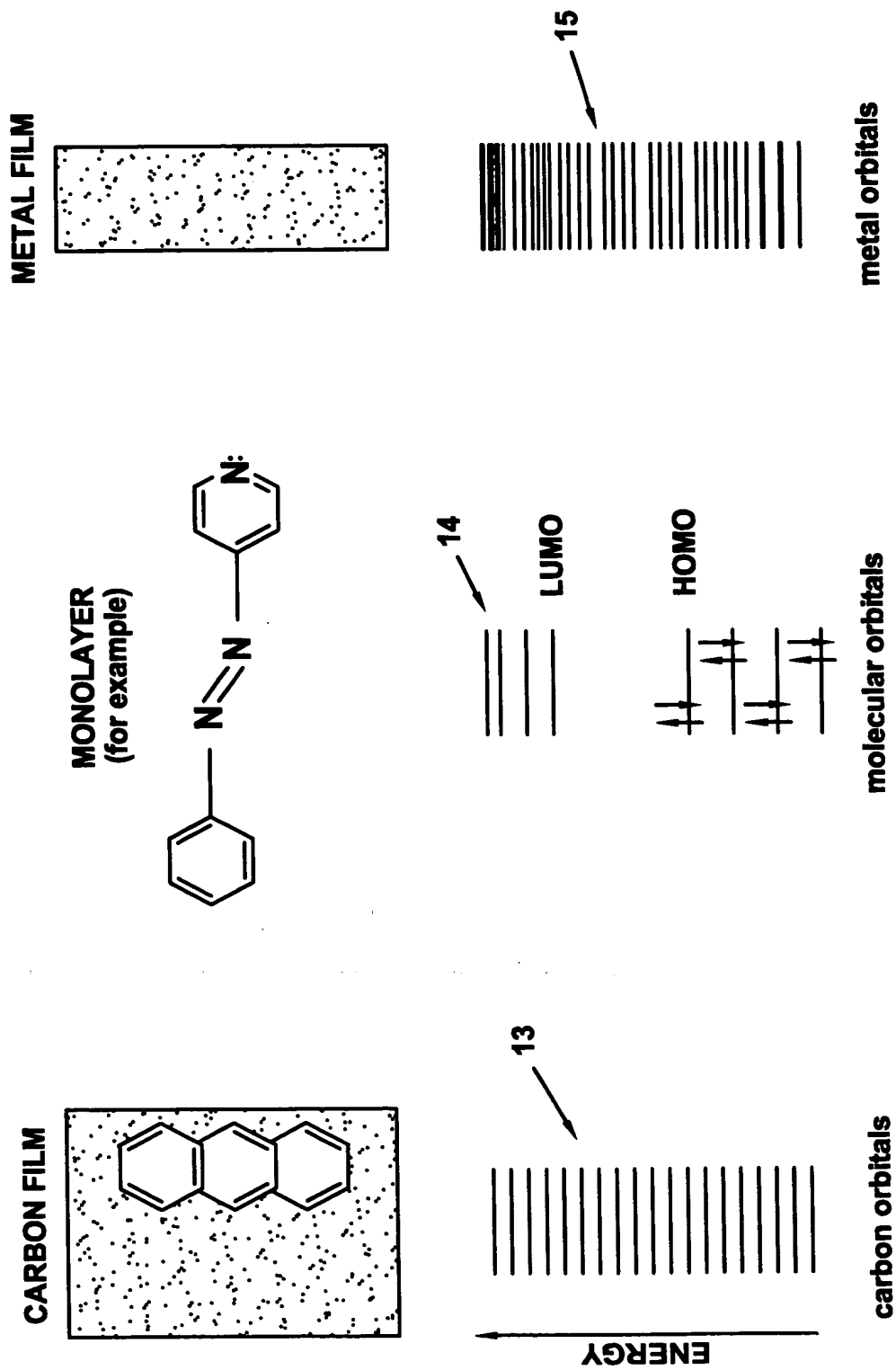
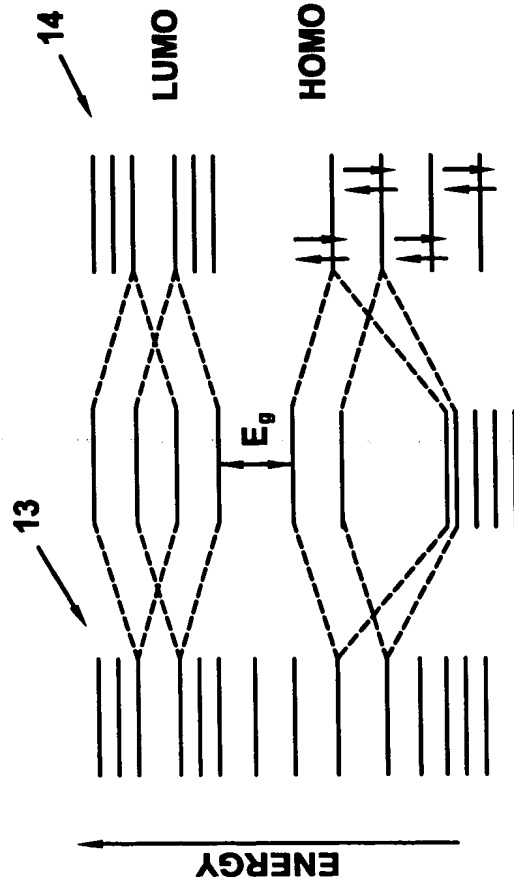
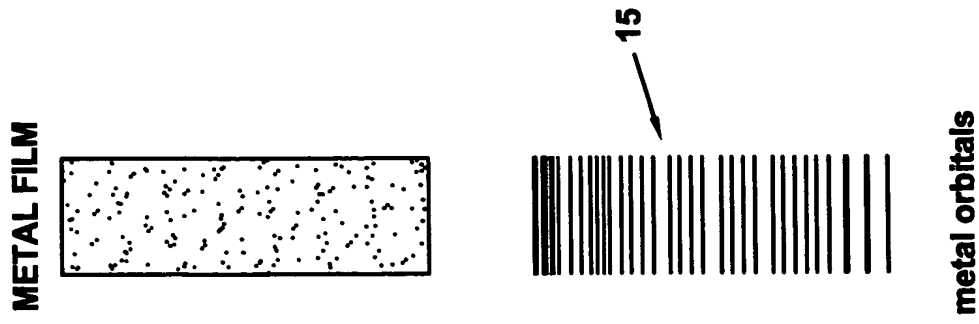
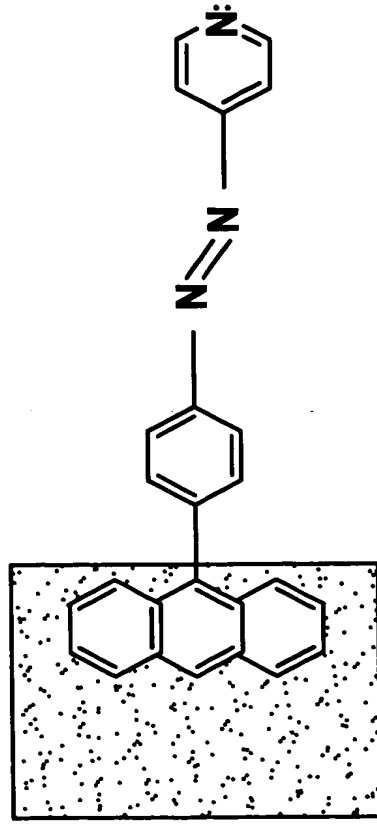


FIG. 3

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Chemically bonded organic monolayer on PPF



carbon orbitals mix with monolayer orbitals

FIG. 4

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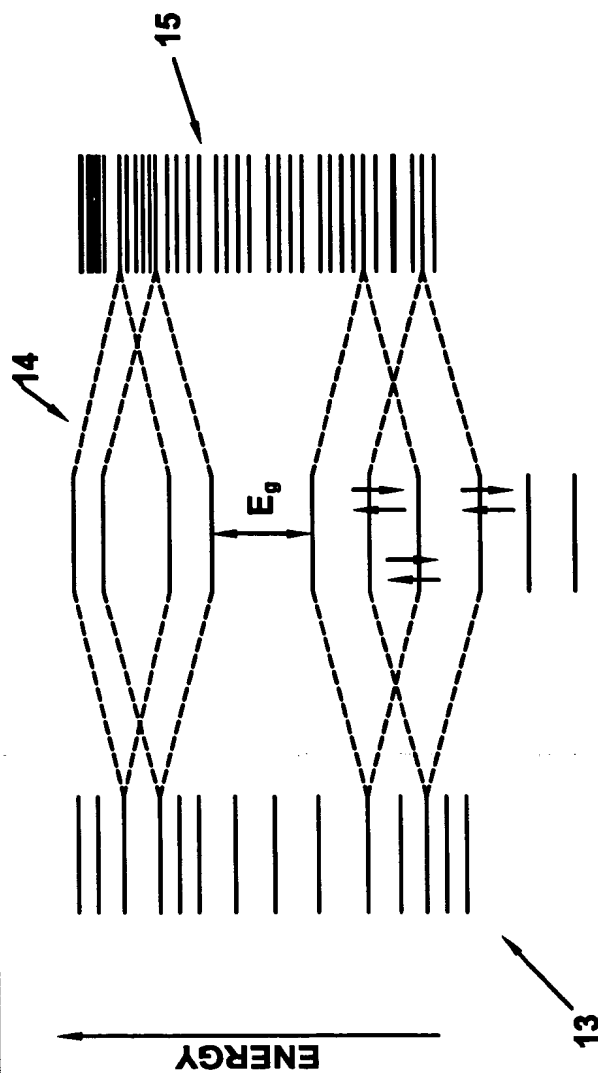
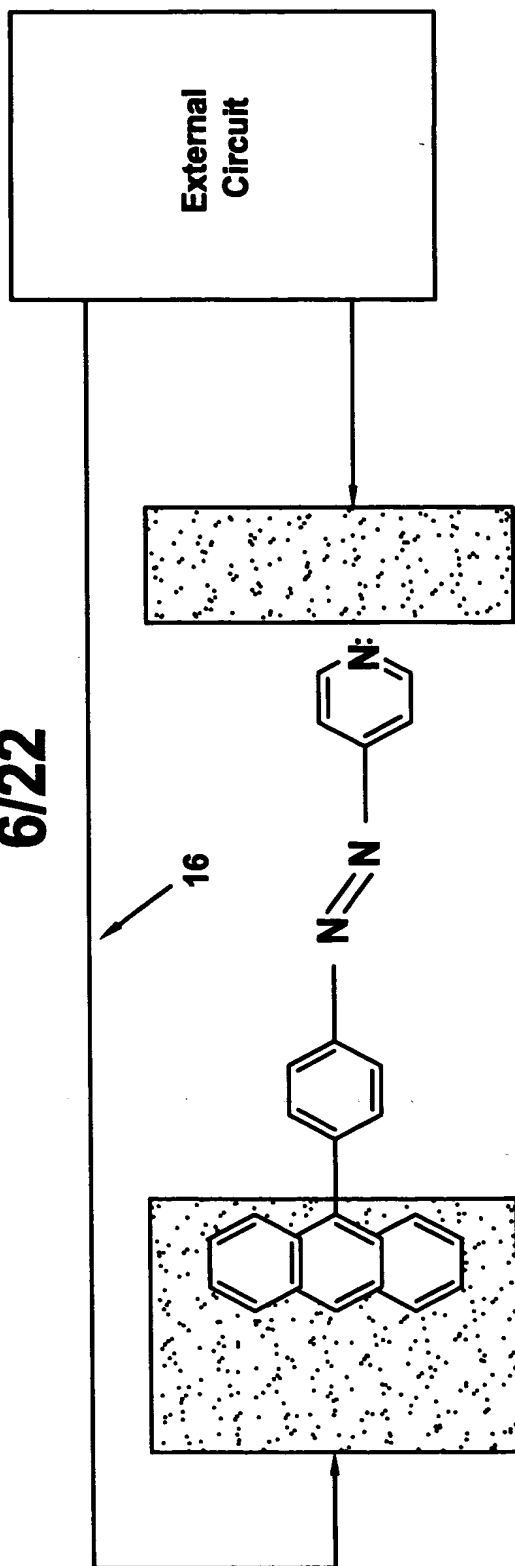


FIG. 5

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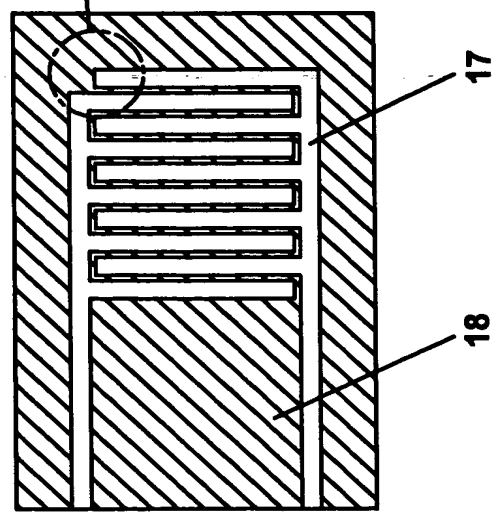
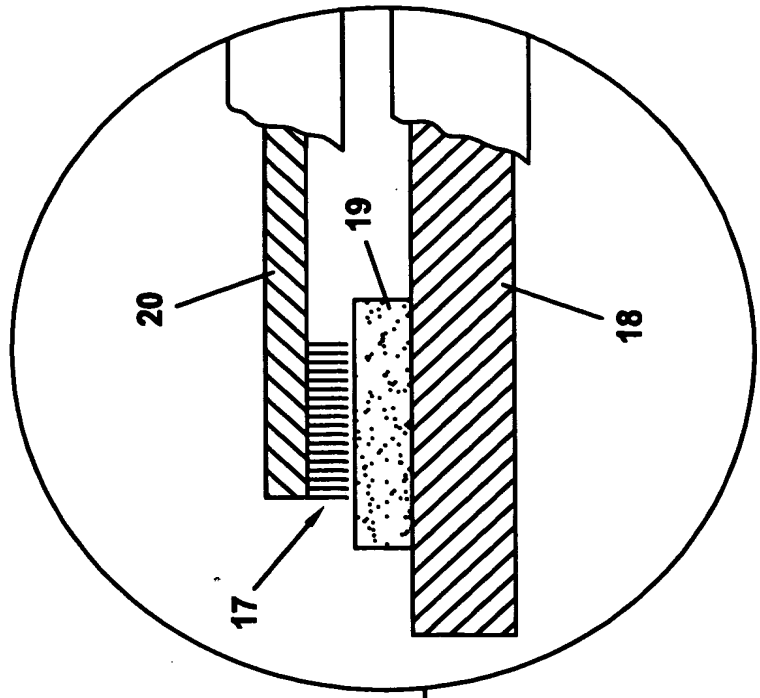


FIG. 6

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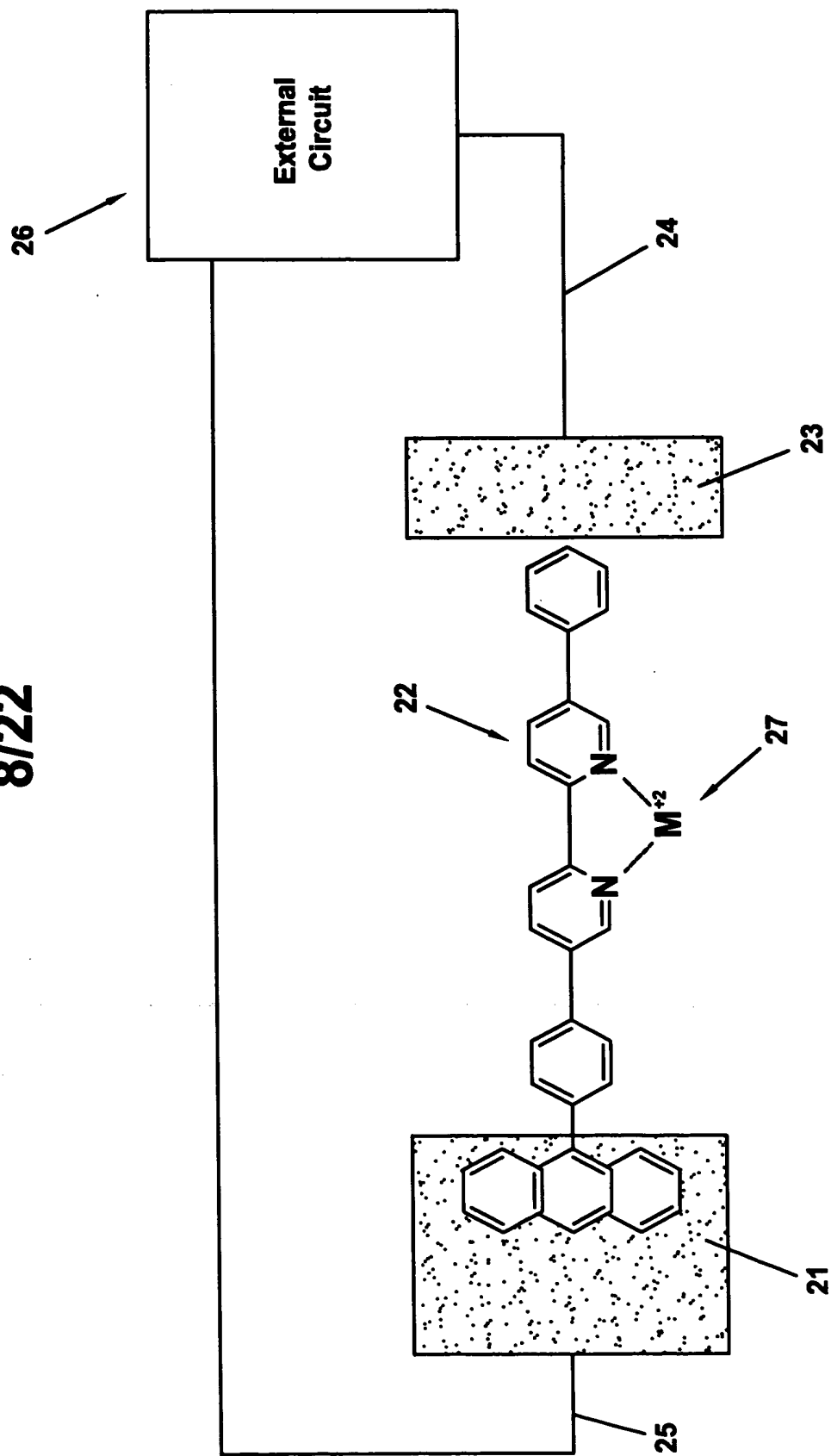


FIG. 7



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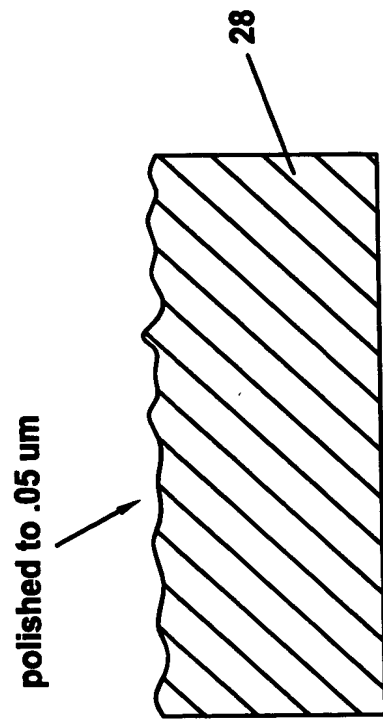
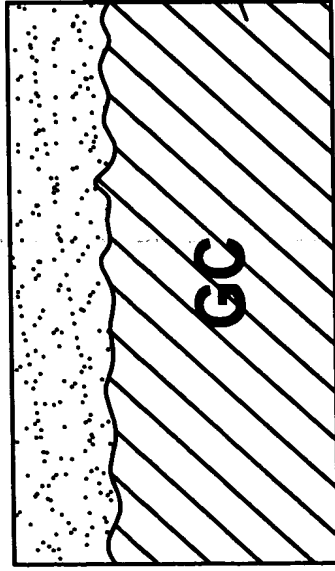


FIG. 8

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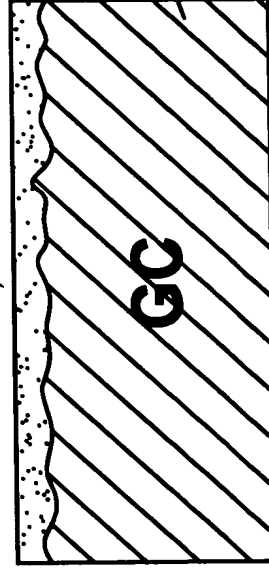
29



28

1000°, H<sub>2</sub>/N<sub>2</sub> atmosphere

30



28

FIG. 9

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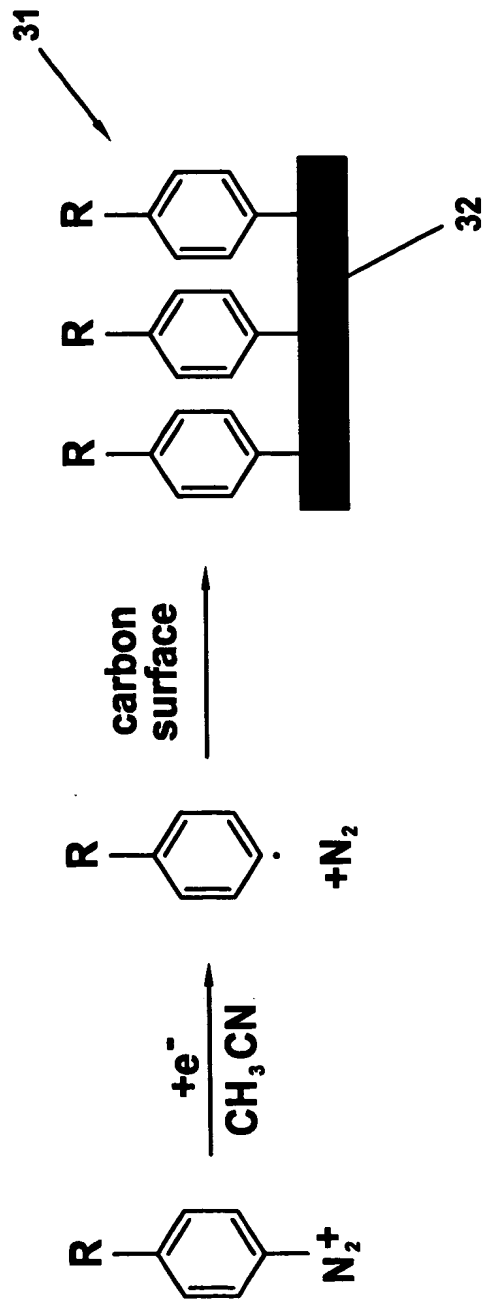


FIG. 10

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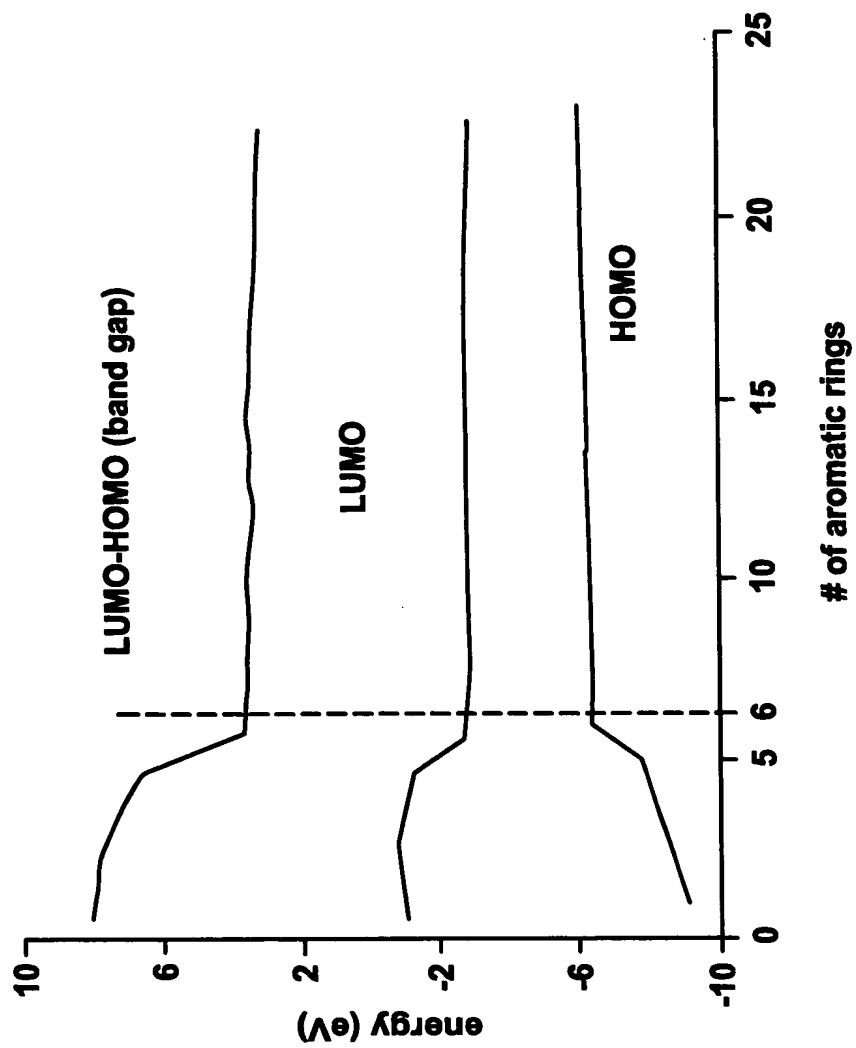
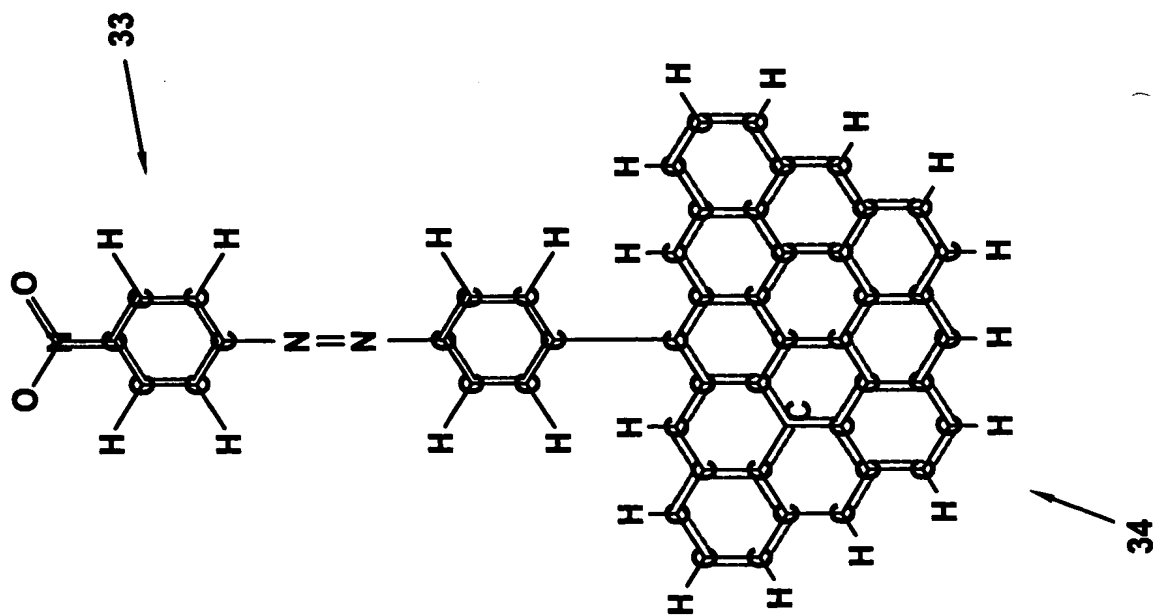


FIG. 11

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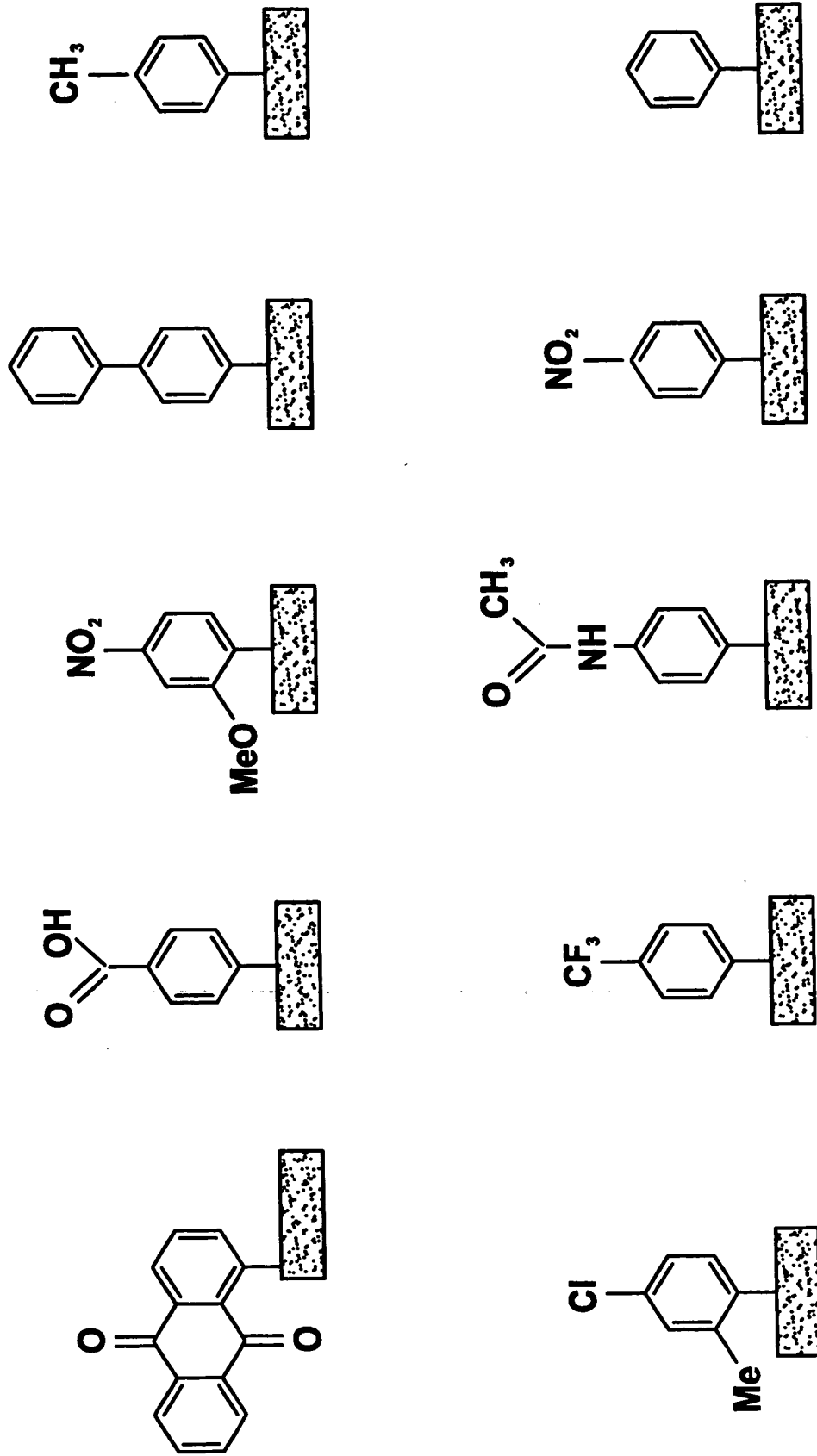


FIG. 12

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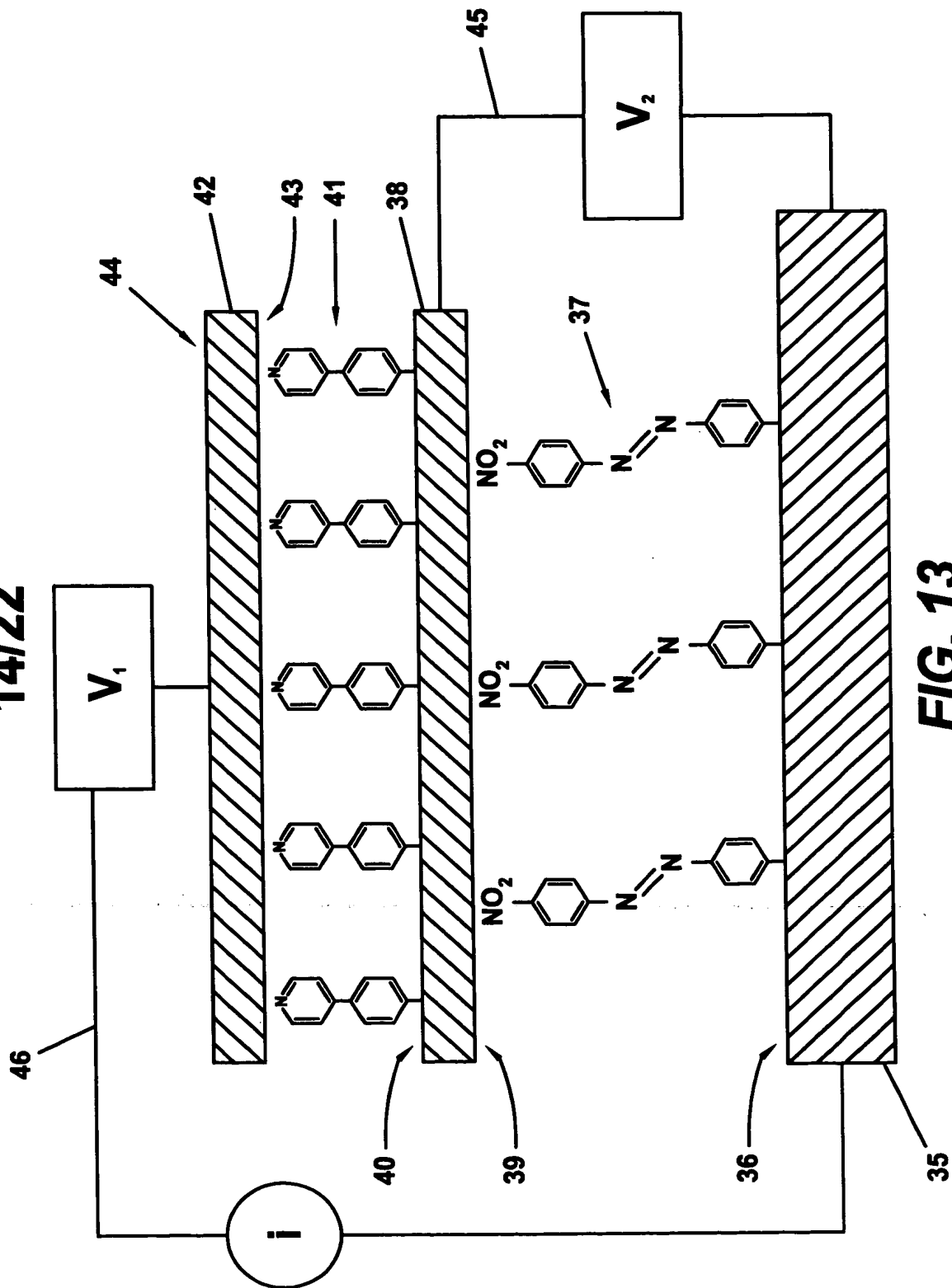
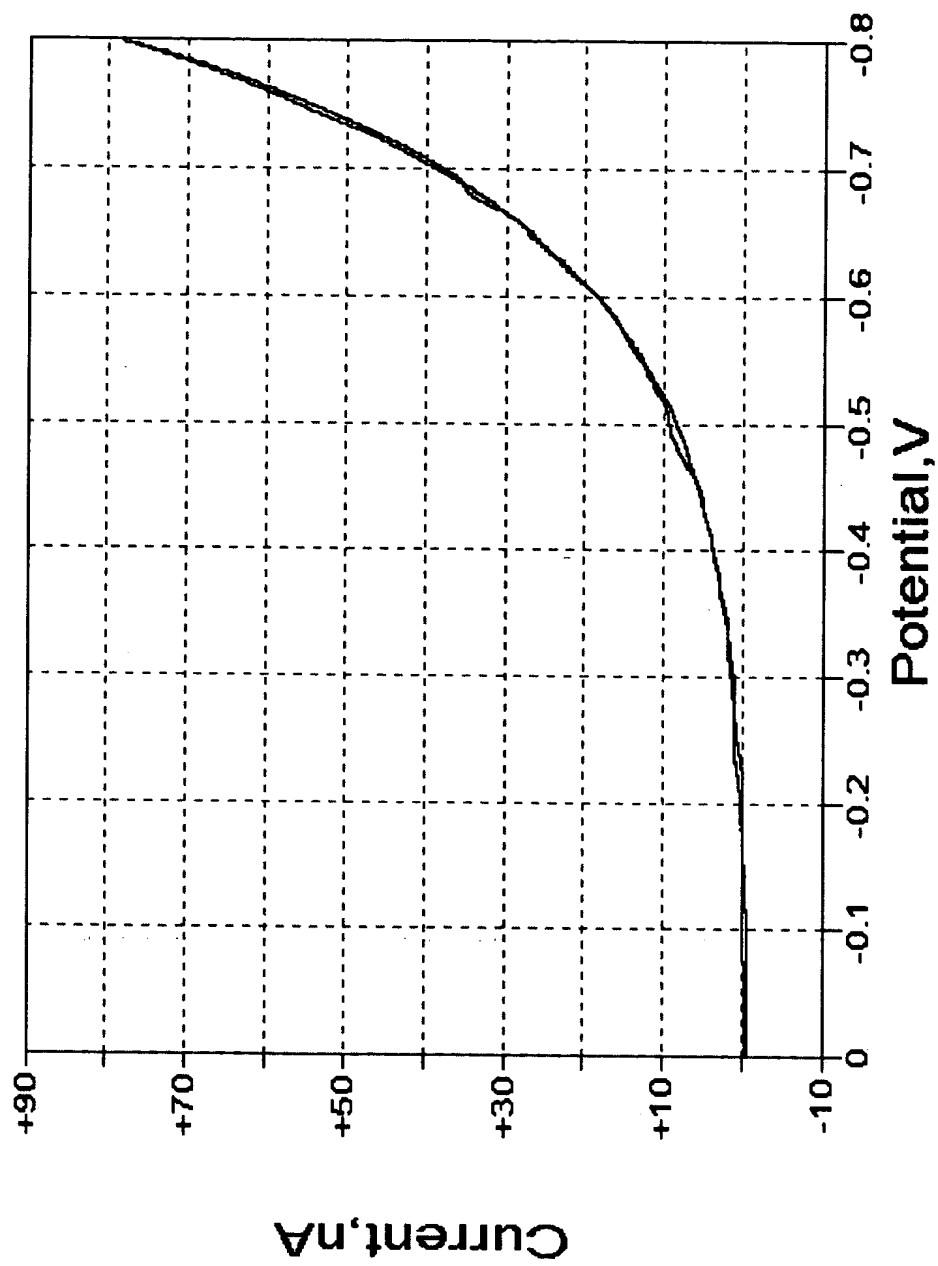


FIG. 13

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E = -330.0mV i = +5.455e-008A

FIG.14

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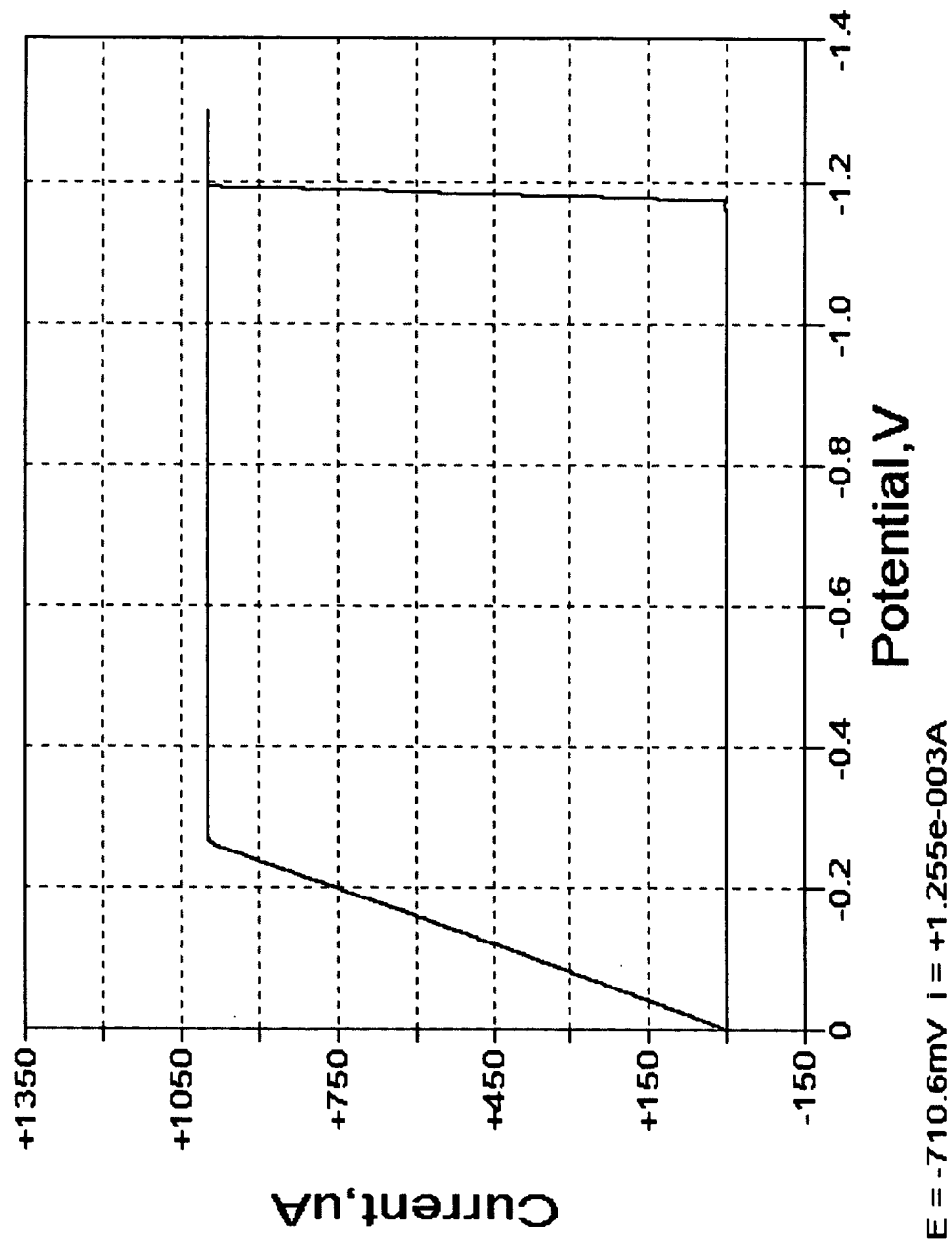


FIG.15



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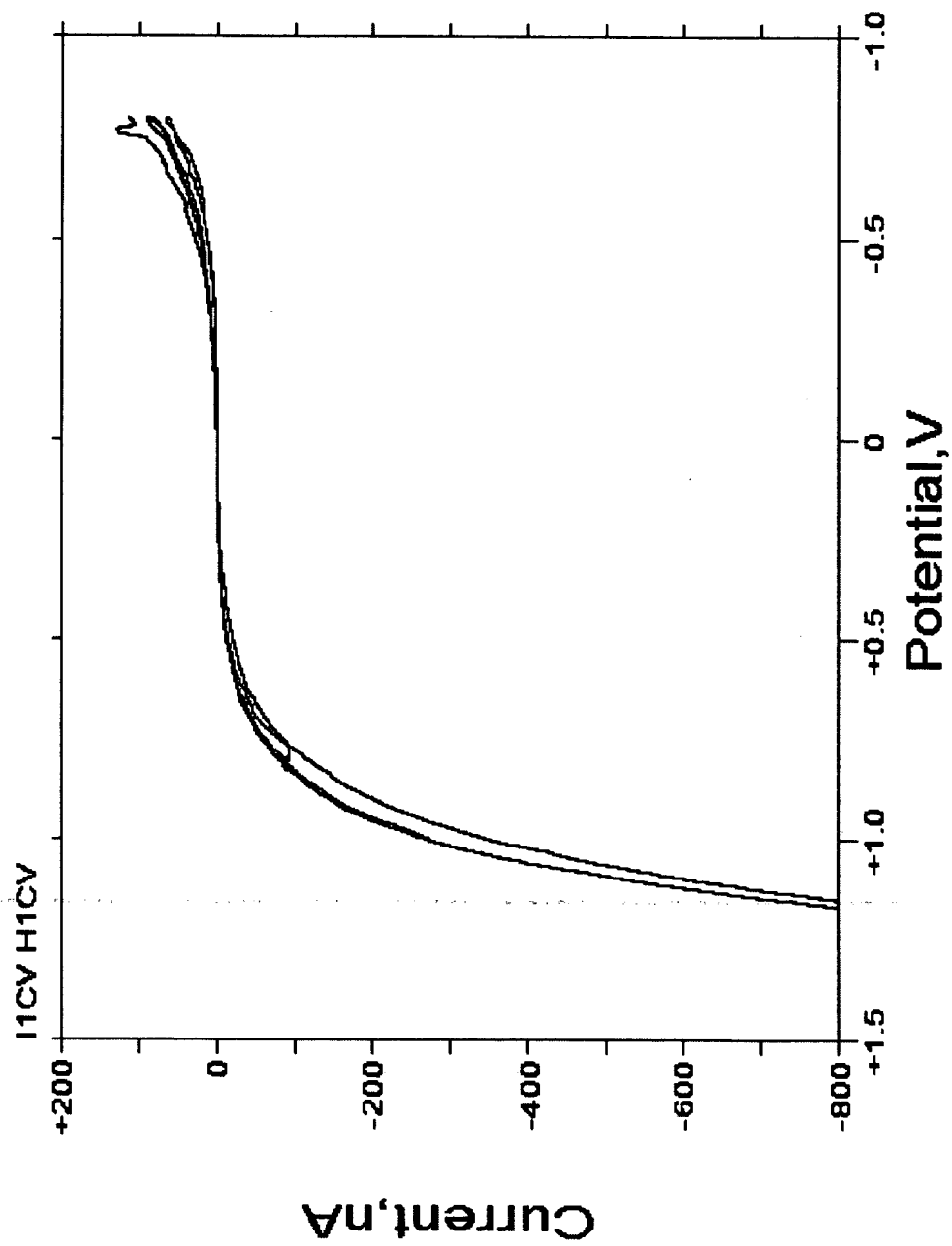


FIG.16

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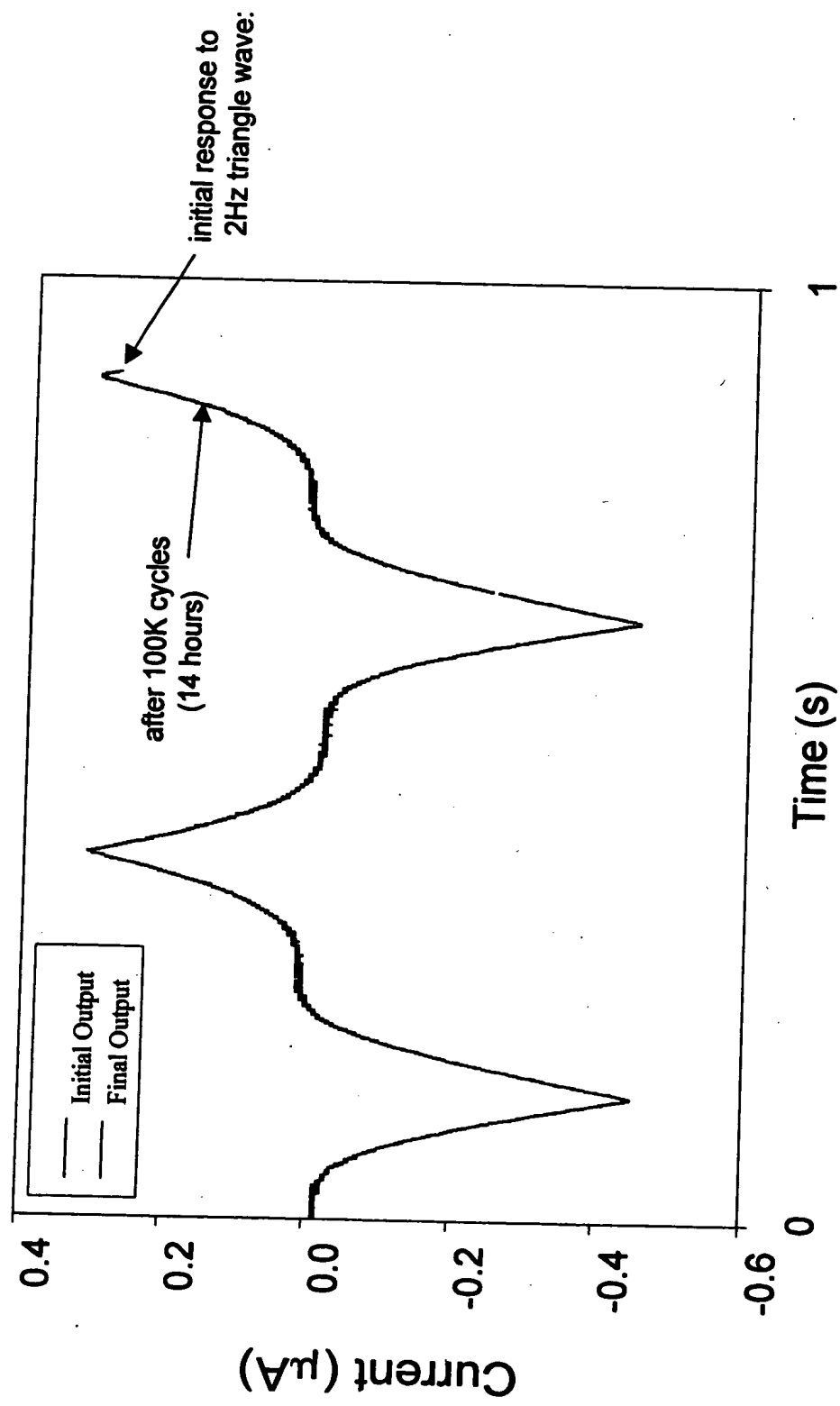


FIG.17

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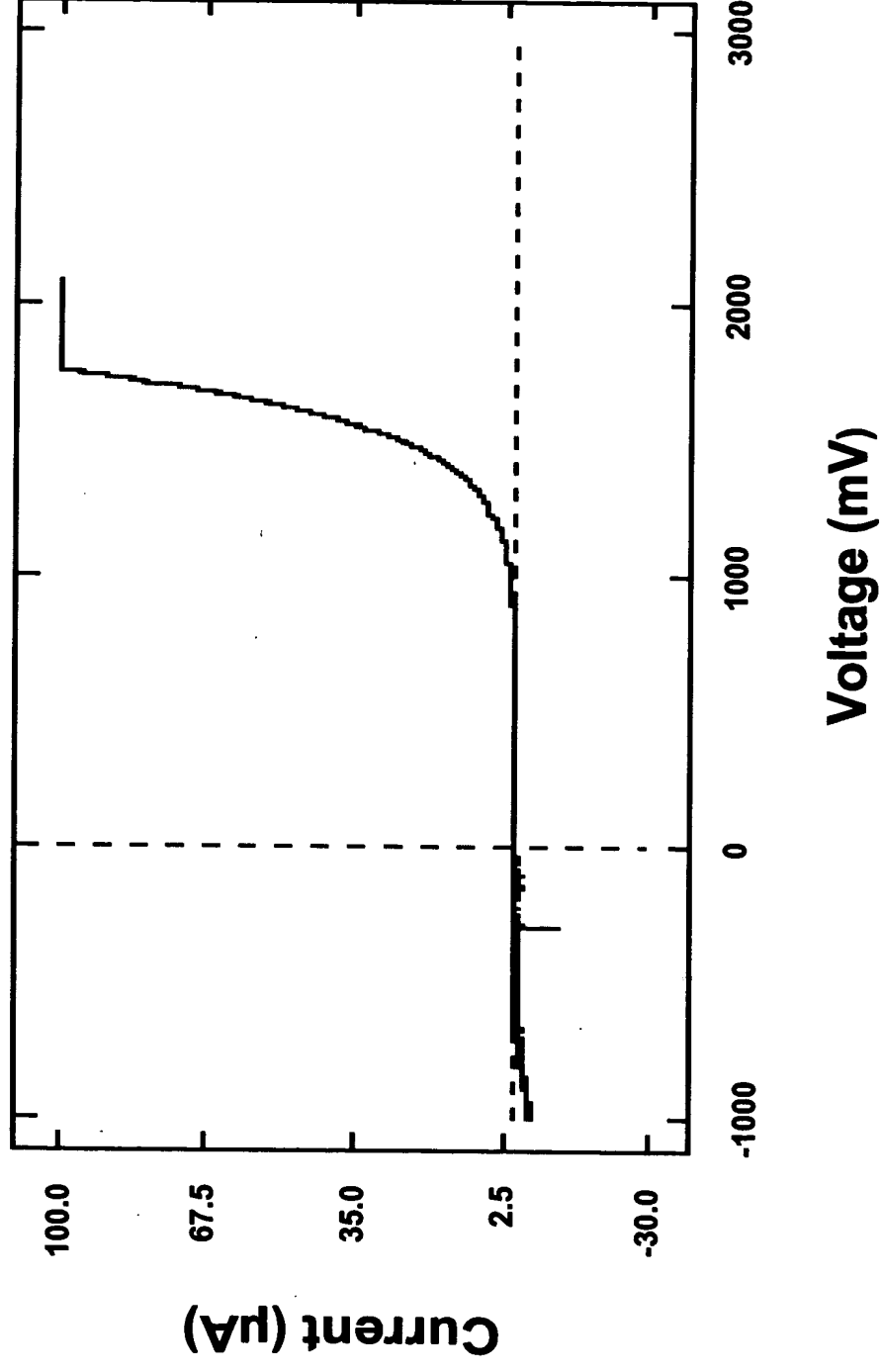


FIG.18

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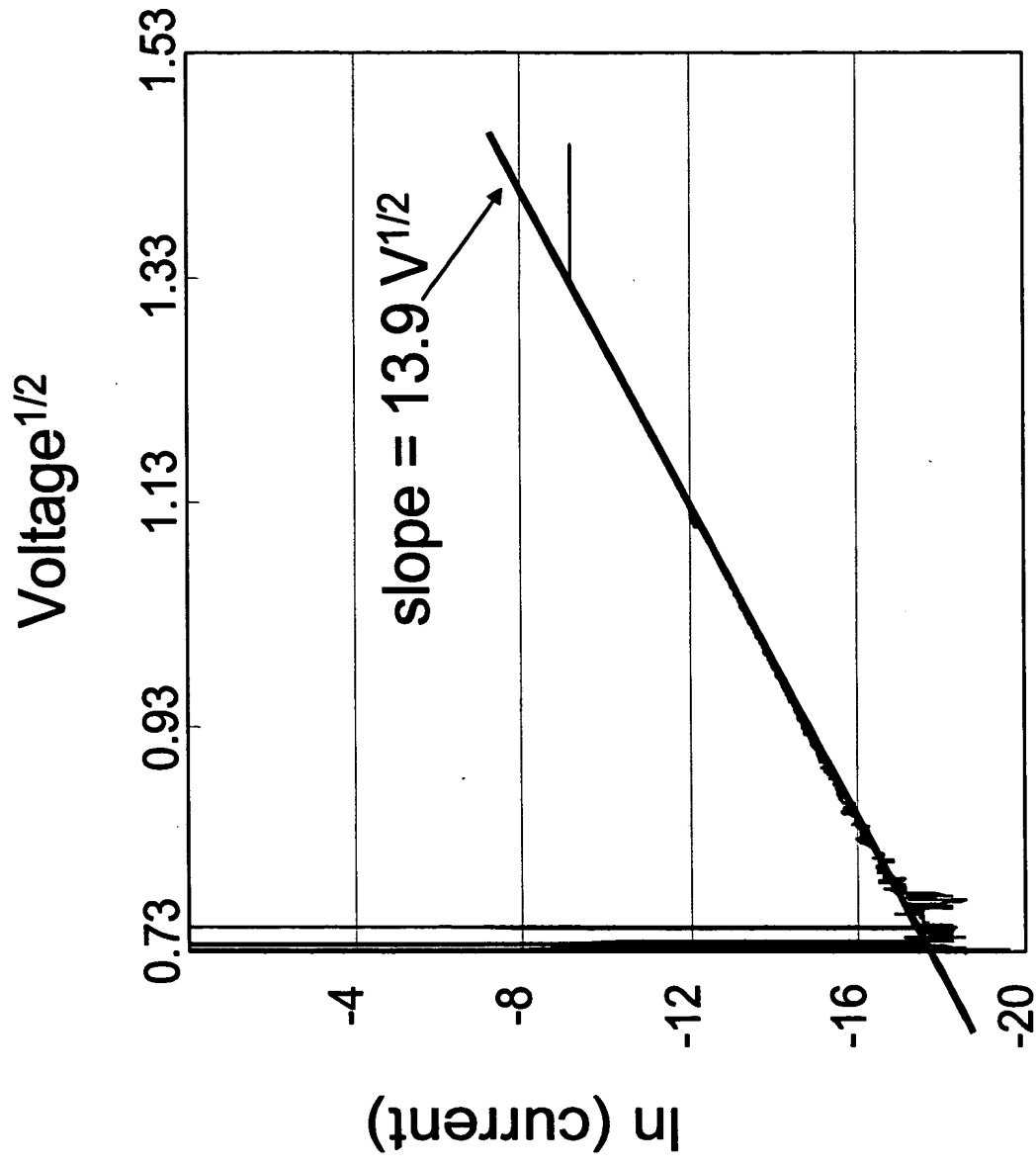


FIG.19

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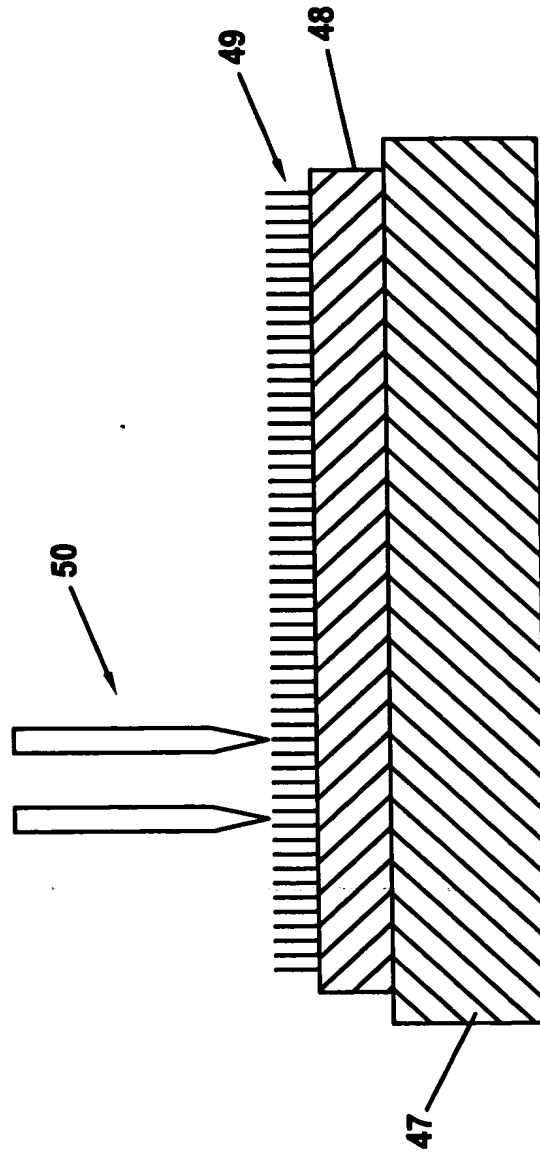


FIG. 20

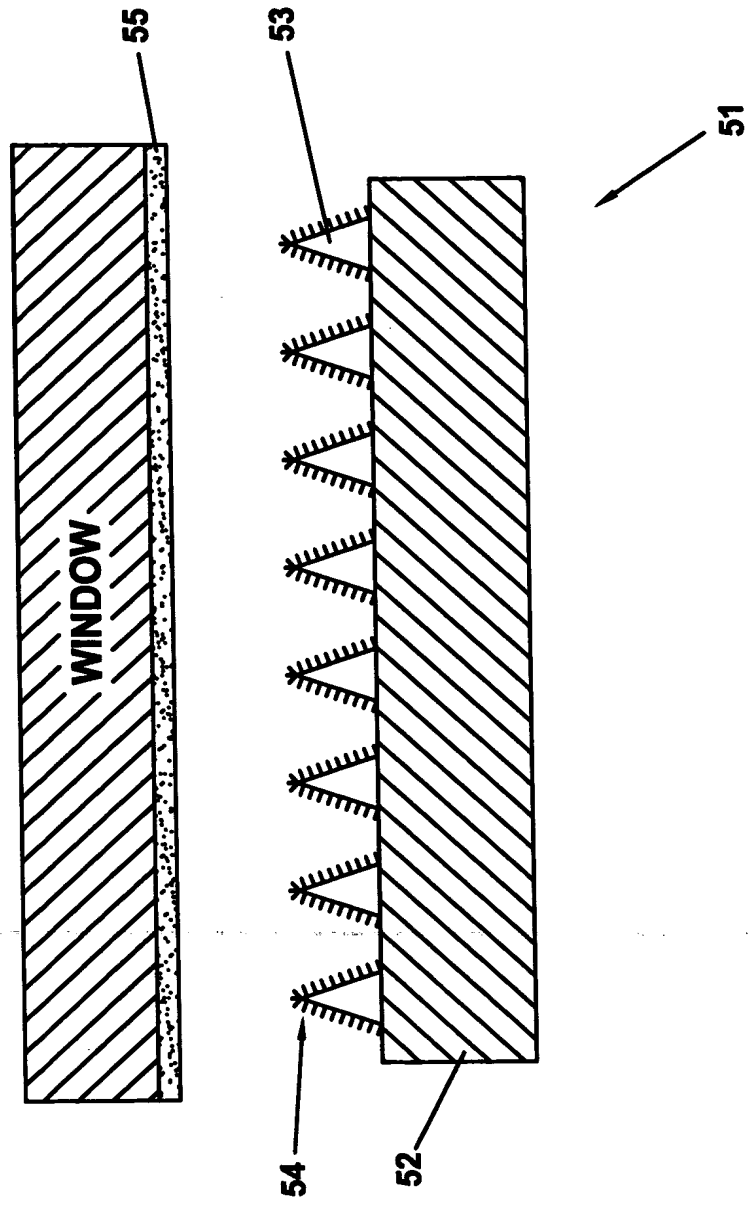


FIG. 21